



2024 Municipal Stormwater Permit Reissuance - Eastern Washington focus

Water Quality Program

Abbey Stockwell; Amy Waterman; Amanda Heye; Mark Melton

Welcome!

To-do

- Quick permit overview
 - Reissuance next steps
- Permit reissuance - Eastern WA focus
 - Preliminary Draft
- Break 😊
- SWMM Updates
- Hear from you



Municipal Stormwater Permits

Quick permit overview





The problem with stormwater is...

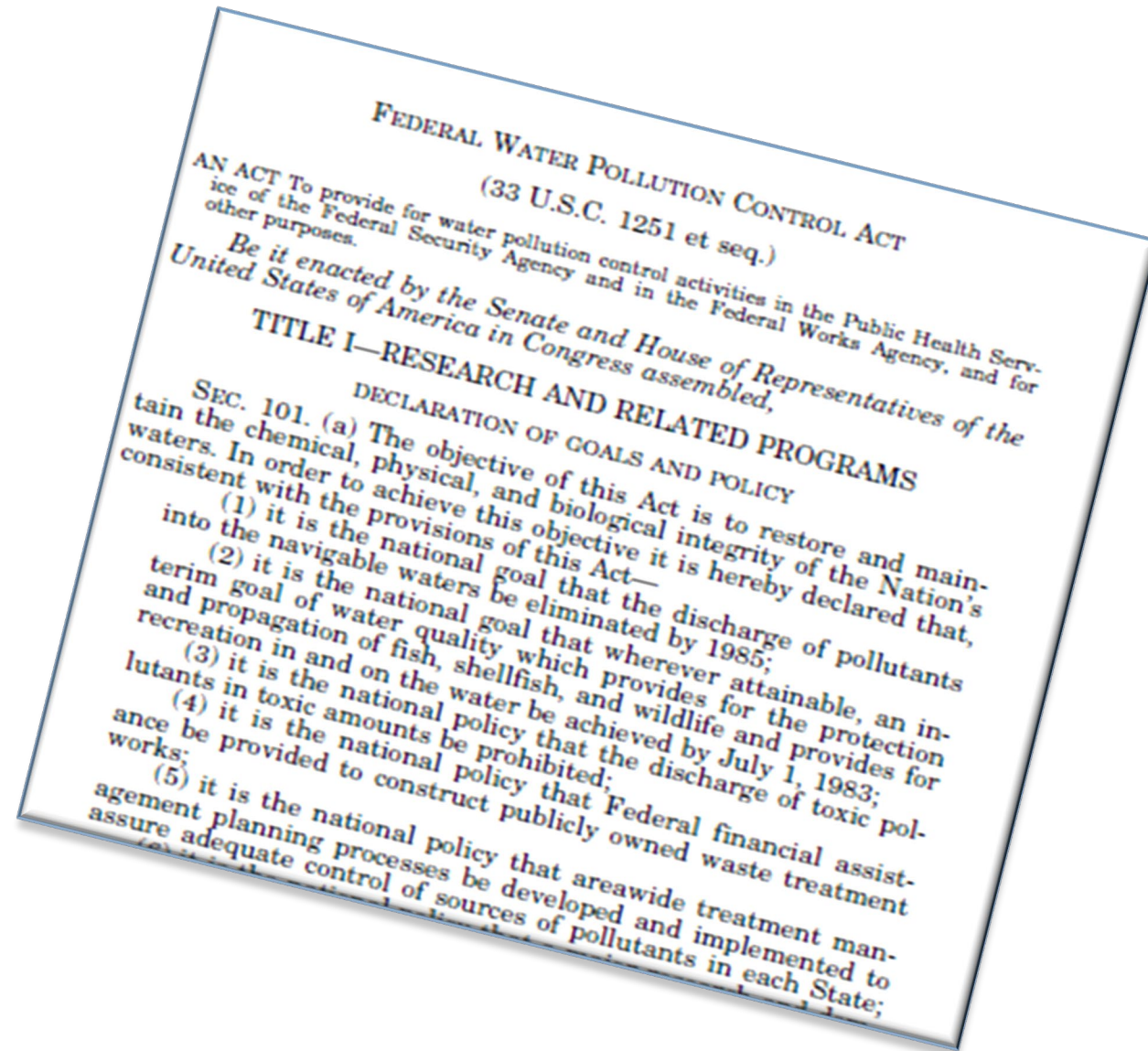


... how we all use the land every day



Municipal Stormwater Permits implement Federal and State rules

- Federal Clean Water Act
 - Maximum Extent Practicable (MEP)
- State Water Pollution Control Act
 - All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART)



So, what is regulated?

- Discharges from **publicly owned Mmunicipal Separate Storm Sewer Systems (MS4s).**
- Including:
 - ✓ Roads with drainage systems
 - ✓ Municipal streets
 - ✓ Catch basins
 - ✓ Curbs and gutters
 - ✓ Ditches and other man-made channels
 - ✓ Storm drains



Permit History

Phase I

(Issued 1995,
reissued 2007, 2012, 2019)

- King, Snohomish, Pierce, & Clark Counties; Cities of Seattle & Tacoma

Western WA Phase II

(Issued 2007,
reissued 2012, 2019)

- 83 cities and parts of 5 counties

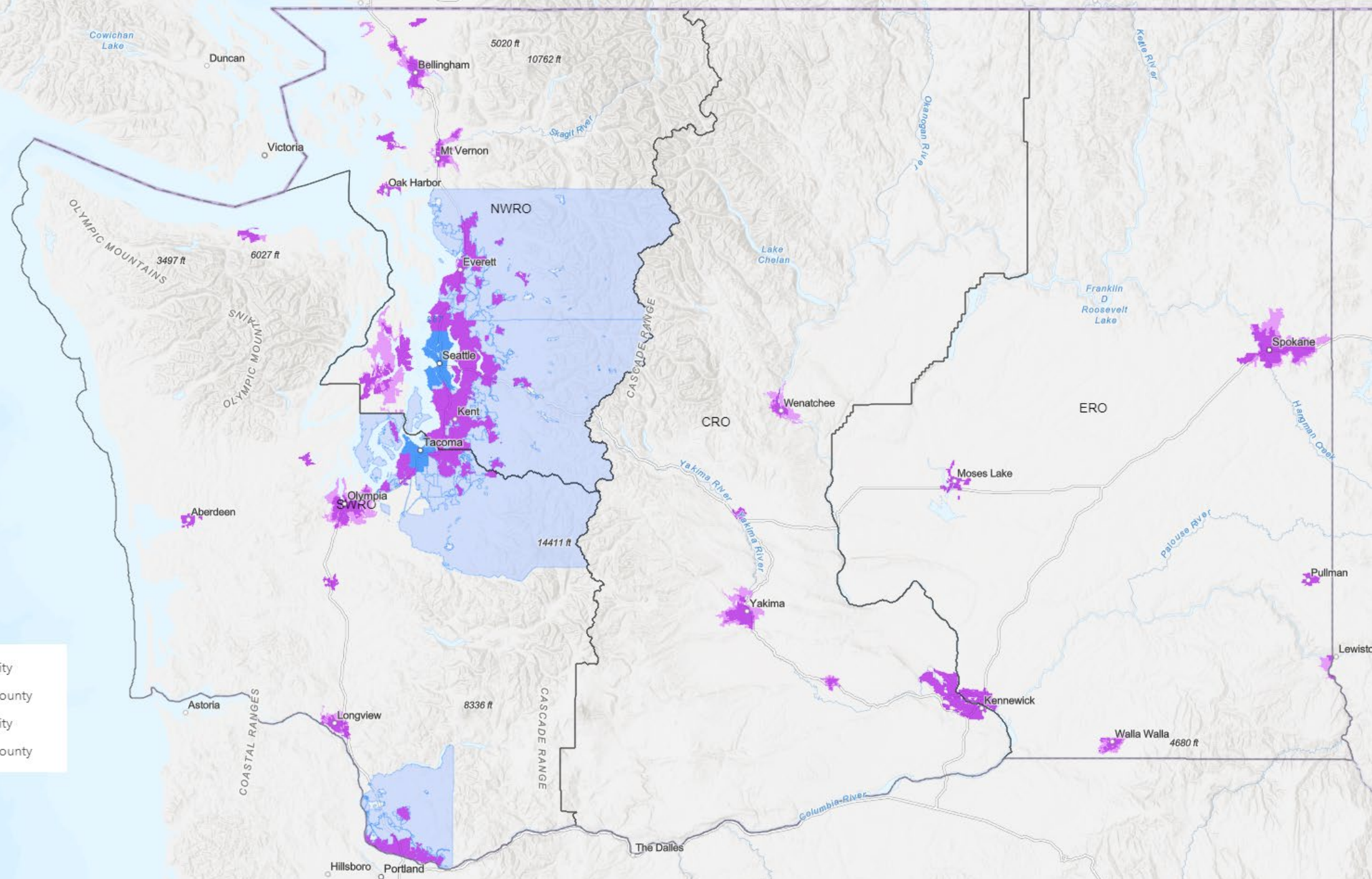
Eastern WA Phase II

(Issued 2007,
reissued 2012, 2019)

- 19 cities and parts of 6 counties

Phase I&II permits
include **Secondary**
Permittees

- 47 Ports, Schools, Irrigation Districts, etc.





Phase I

Western
Phase II

Eastern Phase
II

Municipal Stormwater Permits

Stormwater Management Program



Public Education & Outreach

Public Involvement

Illicit Discharges Detection & Elimination (IDDE)

Controlling Runoff from Construction

Controlling runoff from post-construction

Operations & Maintenance (O&M)

Monitoring and Assessment

Total Maximum Daily Loads (TMDLs)



Stormwater Management Manuals



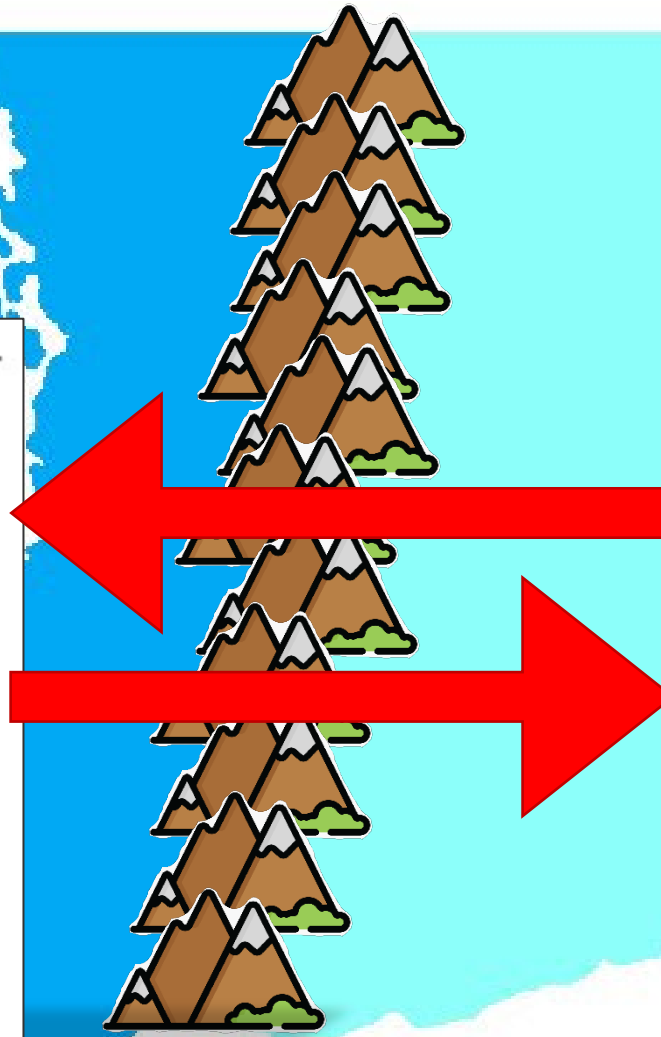
Stormwater Management Manual
for Western Washington



July 2019



Publication Number 18-10-021



Stormwater Management Manual
for Eastern Washington



August 2019



Publication Number 18-10-041

Printed on recycled paper

Things to talk about today – preliminary drafts

- Mapping – outfall reporting standard
- Street Sweeping program
- PCBs – and how the permit is trying to handle this source of pollutants
- Tree retention as a water quality tool
- Monitoring and Assessment – Eastern WA focus
- Appendix 1 updates – threshold updates for applying stormwater controls

Things not covered today

- Structural Stormwater Controls
- (WWA) Phase II retrofit approach
- Stormwater Planning
- Education and Outreach
- EJ
- S4- Compliance with Standards
- Clarifications
- Annual Reports
- TMDLs
- New Permittees
- UICs

Policy Advisory Committee

Structural Stormwater Controls (SSC)

Next preliminary draft – for early 2023



Structural Stormwater Controls Policy Advisory Committee



<https://www.pexels.com/photo-photo-of-people-working-together-1977019/>

Phase II Retrofit program



Proposed changes to S5

- Initial thinking - Not an exhaustive list
- Revised formatting throughout
- Statewide consistency – where appropriate



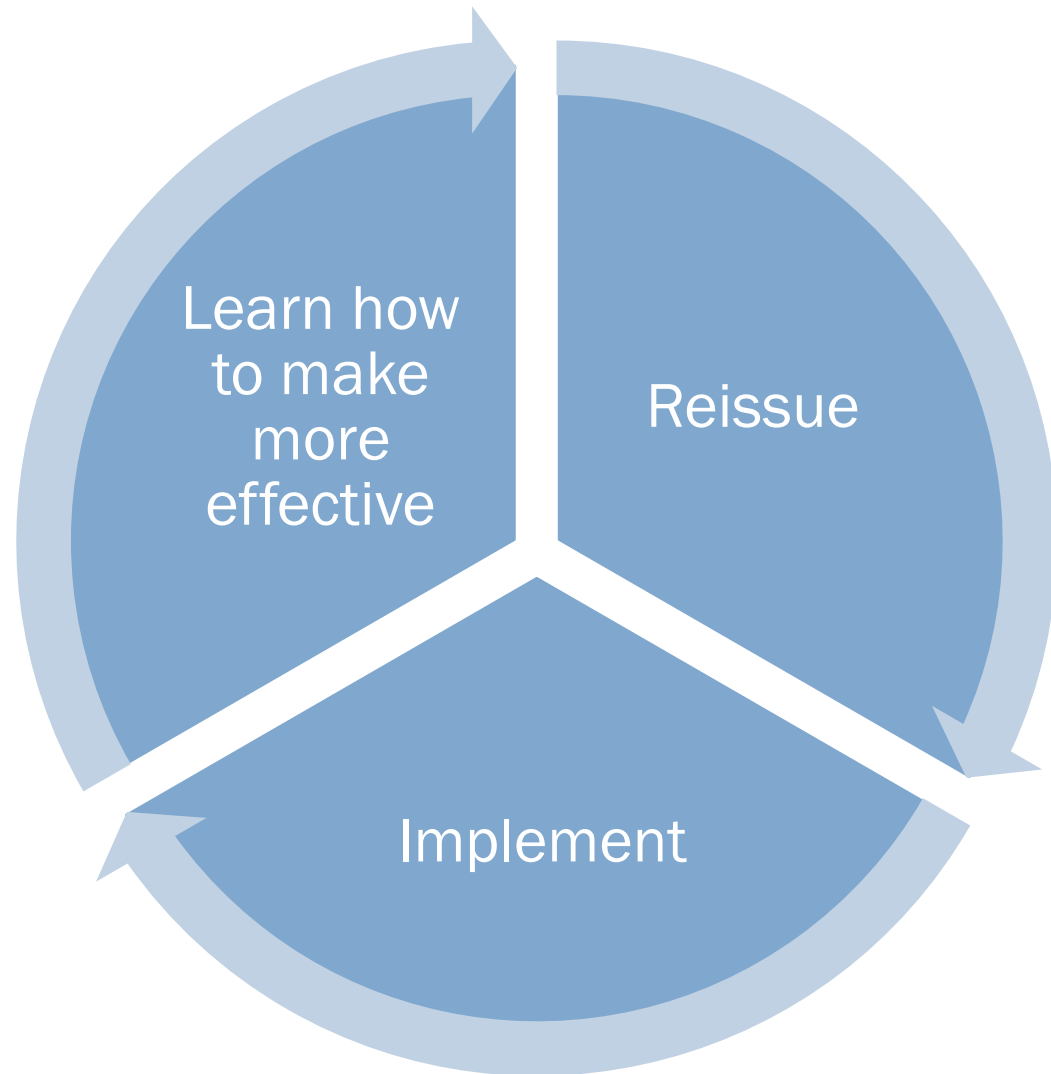
Tentative Reissuance Timeline

Where we're headed next



2024 Municipal Stormwater Permit Reissuance

5-year permit cycle



The Longest



Shortest Time

<https://www.wnyc.org/shows/longestshortesttime/>



Informal Comments due Dec 2!

Submit your comments thru e-
Comments

Excel template to help us sort your
comments

Significant Updates Proposed

- Address tire wear research findings – Road Runoff
- Enhance Source Control requirements
 - street sweeping program
 - PCBs in building materials
- Update Appendix 1
 - Project thresholds
 - Wetland protections



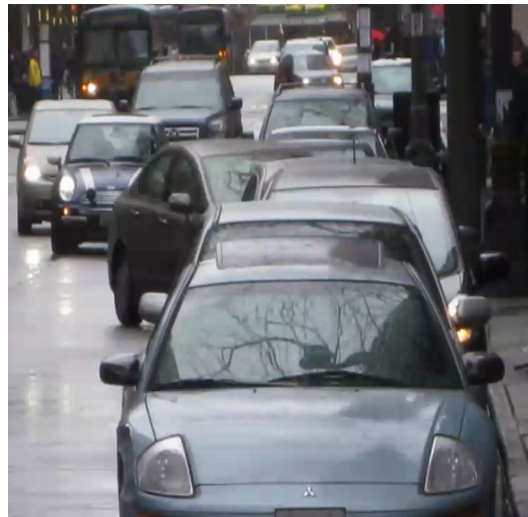
Address road runoff

Tire wear research



Ubiquitous Tire Preservative Kills Salmonids

- It took 20+ years of investigation to identify the chemical that causes pre-spawn mortality of Coho



Road runoff
→
6PPD-quinone



Ecology's questions about 6PPD/q

- 1 Is there a safe, viable alternative to 6PPD?
- 2 Do we have the analytical methods we need?
- 3 What are other biological effects of 6PPD-quinone?
- 4 What are the best stormwater management approaches?
- 5 Where should we prioritize mitigation efforts?

6PPD -> 6PPD-Quinone



Proviso work

- 2021: Identify *existing* BMPs for reducing the toxicity to Coho and other aquatic life
- 2022: Study and develop BMPs to treat stormwater containing tire wear



**Tire/tire
wear sources**

**statewide
priority**



Muni Permit programs

Reviewing requirements to enhance for Road runoff

- Street sweeping program
- Redevelopment
- SSC and SW retrofits



Comments/ Questions?



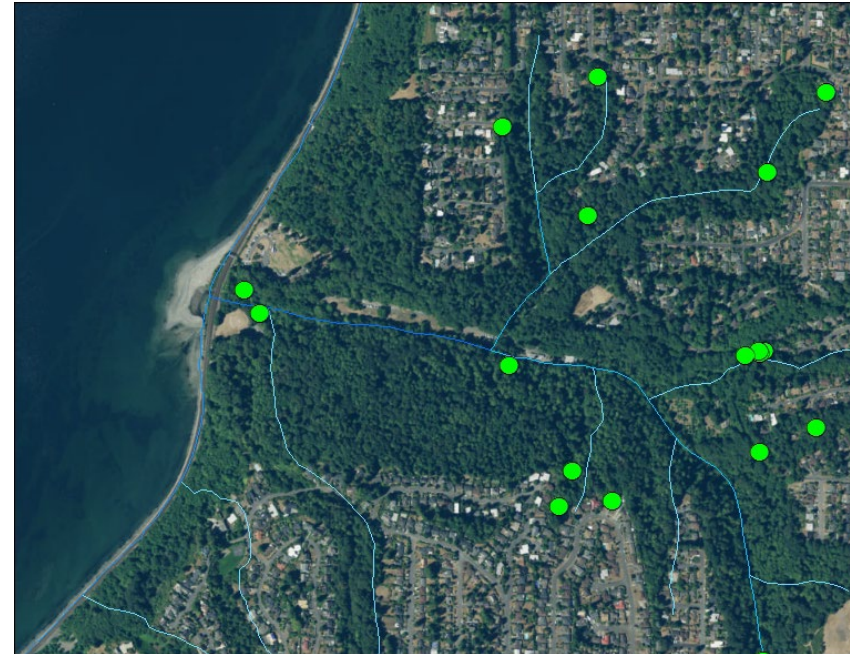
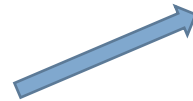
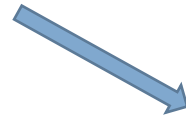
DEPARTMENT OF
ECOLOGY
State of Washington

Mapping

Standard outfall reporting



SW Outfalls to Surface Water





A Reporting Standard...

Will make it easier to share outfall data with each other and with Ecology.

Templates – which will work best?

Excel

Geodatabase

Shapefile

ArcGIS
Online
template

Proposed Attributes

Outfall_ID	REQUIRED
Permit_Number	REQUIRED
Latitude_Decimal_Degrees	Required IF using excel template to submit
Longitude_Decimal_Degrees	Required IF using excel template to submit
Horizontal_Datum	Required IF using excel template to submit
Horizontal_Coordinate_Accuracy	REQUIRED
Horizontal_Coordinate_Collection_Method	REQUIRED
Outfall_Elevation	Recommended
Elevation_Units	
Vertical_Datum	
Elevation_Accuracy	
Elevation_Collection_Method	
Pipe_Or_Ditch_Size	
Pipe_or_Ditch_Size_Units	
Pipe_Or_Ditch_Material	



Questions?

Enhance Source Control requirements

street sweeping program
PCBs in building materials



Street Sweeping





Street sweeping

- 3 yrs to develop program
- Sweep high priority areas
 - Once before rainy season
 - 2 additional times/year
 - 90% of high priority areas that directly discharge to surface waters
- Maintenance, disposal, training



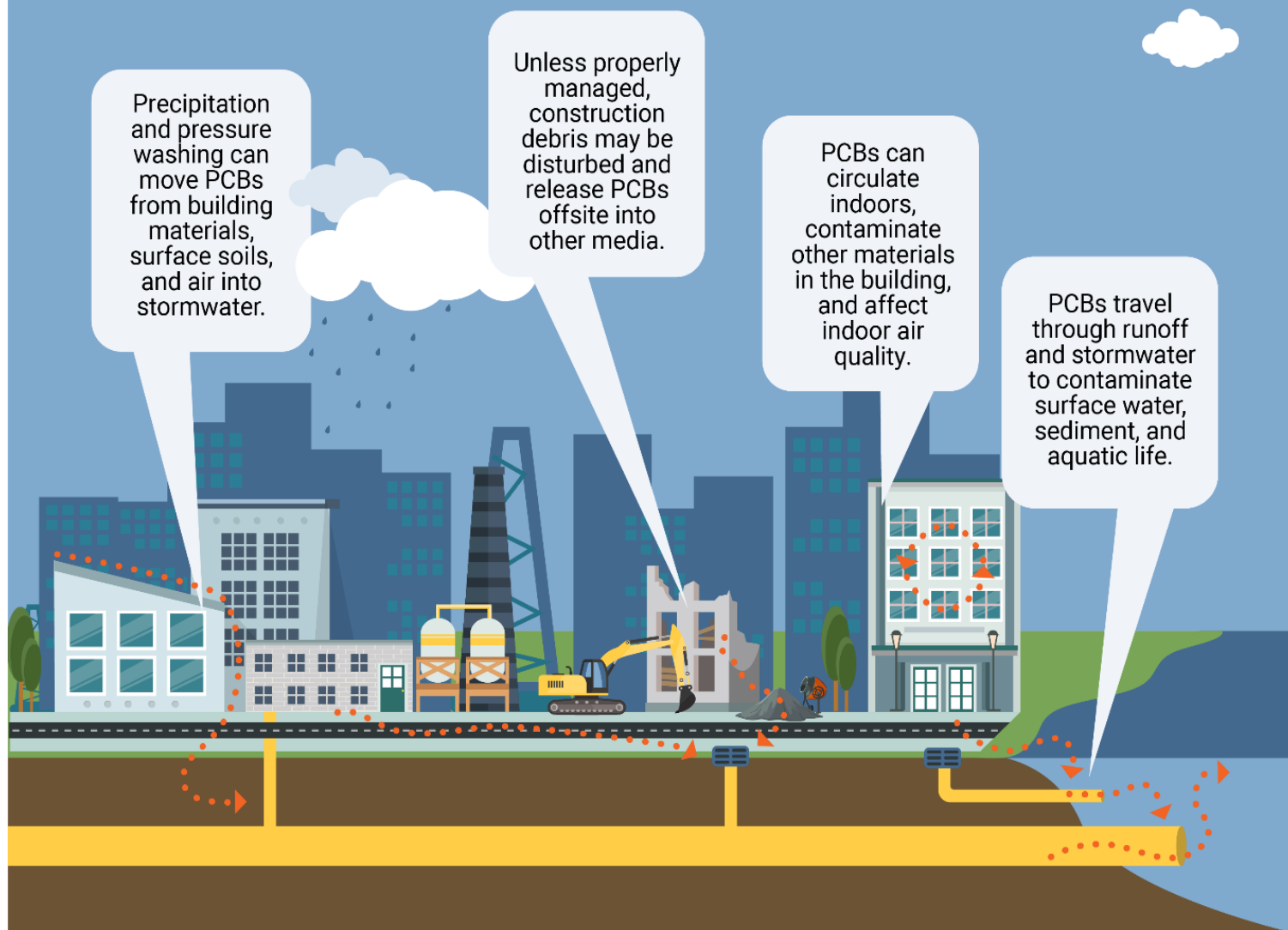
Questions?

Source control for PCBs

- Preventing movement of PCB's from buildings into stormwater
- Target: Exterior building materials for those built between 1950-1980



PCB CONTAMINATION PATHWAYS



Exterior PCB-containing materials on a building degrade and flake off over time.

Greater chance that more PCBs will be released into the environment during renovation and demolition.

PCB's travel to soils and stormwater from rain, pressure washing, construction debris.

Source control for PCBs: Some Tools

- ECY guidance: “How to Find and Address PCB’s in Building Materials”
 - Search “PCB’s in building materials” on website, at bottom
- Permit changes to 3 different sections
 - Education & Outreach
 - Illegal Discharge Detection and Elimination
 - Operations and Maintenance
- Proposed changes to Manual





Education & Outreach

Illicit Discharge Detection and Elimination

- Goal is to avoid external building washwater with PCB's getting into MS4.
- Conditionally allowable discharges are further clarified.



Operations and Maintenance

- For the O&M Plan section, asking permittees to implement policies and practices regarding:
 - ❖ Proper management of washdown water from buildings built between 1950-1980.
 - ❖ Proper handling of building materials and source control in preparation for demolition and renovation



Questions



Tree Retention

Tracking Tree Canopy





Tree Canopy

- Statewide proposal
- Tree canopy critical to receiving water health
- Tree canopy retention as a water quality tool

Tree Canopy Retention

Document:

- existing landscape and riparian tree canopy cover
- canopy change over time

Adopt and implement:

- Tree canopy retention/restoration objectives to support stormwater management







Questions?

Monitoring & Assessment



S8 – Monitoring & Assessment



Effectiveness studies



S8. Monitoring and Assessment - EWA

- Continuing to implement a regional effectiveness study, or lead own study – similar to current requirements
- SAM Effectiveness Study and Source ID Program –
 - SAM = Stormwater Action Monitoring
 - Pooled funding program – based on population
 - Vote on studies by participating in Stormwater Work Group
- Stormwater discharge monitoring

Questions/Comments?



Controlling runoff & Appendix 1

Thresholds

Wetlands



EWA Controlling runoff and Appendix 1

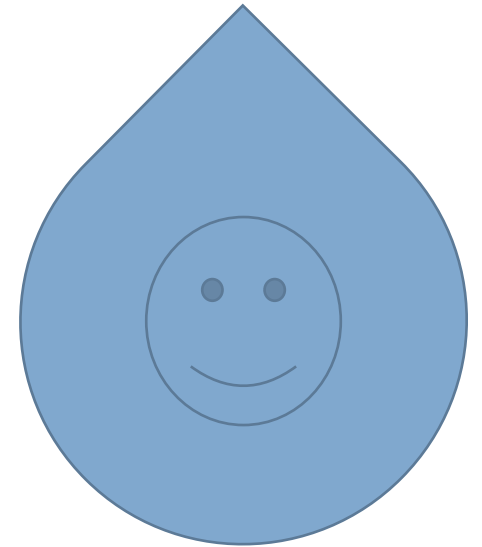
- Exploring options re: One-Acre Land disturbing threshold

1-Acre land disturbance (43,560 sf)

5000 sf of Hard Surface or vegetation conversion

New and Redevelopment thresholds

Core Element's thresholds



EWA Controlling runoff and Appendix 1

New Core Element #8

- Wetland protections



Comments/ Questions?

abbey.stockwell@ecy.wa.gov
amy.waterman@ecy.wa.gov
amanda.hey@ecy.wa.gov





Questions and Discussion